

CLAIM AMENDMENTS

1 1. (Currently amended) A method comprising the steps of  
2 sending one or more upstream signals as pulse code modulated data without packet  
3 headers using an upstream cable protocol;  
4 sending one or more downstream signals as pulse code modulated data without packet  
5 headers using a downstream cable protocol; and  
6 enclosing the one or more downstream signals as the pulse code modulated data without  
7 application-level packet headers in a Motion Pictures Experts Group (MPEG) transport, while  
8 limiting use of echo cancellation and jitter buffering.

1 2. (Previously presented) The method of claim 1, wherein the upstream protocol is Data-  
2 Over-Cable System Interface Specification (DOCSIS).

1 3. (Original) The method of claim 1, wherein the step of sending one or more upstream  
2 signals comprises mapping one or more pulse code modulated samples of the one or more  
3 signals taken at a sampling interval to an allocation of mini-slots in the upstream protocol.

1 4. (Original) The method of claim 3, wherein the sampling interval is 125 microseconds  
2 and the mini-slots occur at 6.25 microsecond intervals.

1 5. (Original) The method of claim 1, further comprising the step of multiplexing two or  
2 more signals in one mini-slot in the upstream protocol.

1 6. (Previously presented) The method of claim 1, wherein the downstream protocol is  
2 Data-Over-Cable System Interface Specification (DOCSIS).

1 7. (Original) The method of claim 1, wherein the step of sending one or more  
2 downstream signals comprises mapping one or more pulse code modulated samples of the one or  
3 more signals taken at a sampling interval to a Motion Pictures Experts Group (MPEG) transport  
4 layer.

1 8. (Original) The method of claim 1, wherein the step of sending one or more  
2 downstream signals comprises multiplexing multiple signals within a single Motion Pictures  
3 Experts Group (MPEG) packet identifier.

1 9. (Original) The method of claim 1, wherein the method is performed in a cable system  
2 having a media terminal adapter (MTA), such that subscriber signalling functionality is reduced  
3 in the MTA.

1 10. (Original) The method of claim 1, wherein the method reduces throughput delay and  
2 jitter for signals, thereby improving signal quality over existing transport methods.

1 11. (Original) The method of claim 1, wherein at least one of the one or more upstream  
2 signals and the one or more downstream signals is a voice signal.

1 12. (Original) The method of claim 1, wherein at least one of the one or more upstream  
2 signals and the one or more downstream signals is a video signal.

1 13. – 20. (Canceled)

1 21. (Currently amended) A method comprising the steps of:

2 providing one or more signals at a sampling interval, yielding pulse code modulated

3 (PCM) data;

4 transporting downstream signals as the PCM data without packet headers over a cable  
5 media using a downstream cable protocol; and

6 enclosing the downstream signals as the pulse code modulated data without application-  
7 level packet headers in a Motion Pictures Experts Group (MPEG) transport, while limiting use of  
8 echo cancellation and jitter buffering.

1 22. (Previously presented) The method of claim 21, wherein the downstream protocol is  
2 Data-Over-Cable System Interface Specification (DOCSIS).

1 23. (Original) The method of claim 21, wherein the step of providing the one or more  
2 signals comprises mapping each byte of pulse code modulated data to a Motion Pictures Experts  
3 Group (MPEG) transport layer.

1 24. (Original) The method of claim 21, wherein the step of providing the one or more  
2 signals comprises multiplexing multiple signals within a single Motion Pictures Experts Group  
3 (MPEG) packet identifier.

1 25. (Original) The method of claim 21, wherein the method reduces throughput delay and  
2 jitter for signals, thereby improving signal quality over existing transport methods.

1 26. (Original) The method of claim 21, wherein at least one of the one or more signals is  
2 a voice signal.

1 27. (Previously presented) The method of claim 21, wherein at least one of the one or  
2 more signals is a video signal.

1 28. (Currently amended) An apparatus comprising:  
2 a sampler, arranged and constructed to sample one or more signals at a sampling interval,  
3 yielding pulse code modulated (PCM) data; and  
4 a transport device, arranged and constructed to transport the PCM data without packet  
5 headers over a cable media using an upstream cable protocol;  
6 wherein the transport device transports downstream signals enclosed as the pulse code  
7 modulated data without application-level packet headers in a Motion Pictures Experts Group  
8 (MPEG) transport, while limiting use of echo cancellation and jitter buffering.

1 29. (Previously presented) The apparatus of claim 28, wherein the upstream protocol is  
2 Data-Over-Cable System Interface Specification (DOCSIS).

1 30. (Original) The apparatus of claim 28, wherein the step of sampling the one or more  
2 signals comprises mapping each byte of pulse code modulated data to one of a plurality of mini-  
3 slots in the upstream protocol.

1 31. (Original) The apparatus of claim 30, wherein the sampling interval is 125  
2 microseconds and each of the plurality of mini-slots occurs at 6.25 microsecond intervals.

1 32. (Original) The apparatus of claim 28, further comprising a multiplexor for  
2 multiplexing two or more signals in one mini-slot in the upstream protocol.

1 33. (Original) The apparatus of claim 28, wherein the apparatus reduces throughput delay  
2 and jitter for signals, thereby improving signal quality over existing transport methods.

1 34. (Original) The apparatus of claim 28, wherein at least one of the one or more signals  
2 is a voice signal.

1 35. (Previously presented) The apparatus of claim 28, wherein at least one of the one or  
2 more signals is a video signal.

1 36. (Original) The apparatus of claim 28, wherein the apparatus is part of a media  
2 terminal adapter.

1 37. (Canceled)

1 38. (Previously presented) The method of claim 1, wherein the step of sending one or  
2 more upstream signals comprises sending the one or more upstream signals as pulse code  
3 modulated data in a form that allows transfer to Public Switched Telephone Network (PSTN)  
4 without transcoding the pulse code modulated data of the one or more upstream signals.